WO 2005/058349 PCT/EP2004/014379

Claims

- 1. An immunogenic composition comprising:
 - (a) an immunogen comprising
 - (i) IL-12, IL-23, or a subunit or component thereof; and
 - (ii) a carrier;
 - and (b) an adjuvant comprising one or more of cholesterol; oil-in-water emulsion; oil-in-water emulsion low dose; tocopherol; liposome; QS21; and 3D-MPL
- 2. An immunogenic composition according to claim 1 in which the immunogen comprises the P35 subunit of IL-12.
- 3. An immunogenic composition according to claim 1 in which the immunogen comprises the P40 subunit of IL-12 or IL-23.
- 4. An immunogenic composition according to claim 2 or 3 in which the immunogen comprises at least one surface epitope of P35 or P40.
- 5. An immunogenic composition according to claim 1 in which the carrier comprises one or more of: Keyhole Limpet Haemocyanin (KLH); bovine serum albumin (BSA); tetanus toxin (TT), diphtheria toxin (DT); Domain 1 of Fragment C of TT; the translocation domain of DT; Hep B core protein; PADRE; P2; and P30.
- 6. An immunogenic composition according to any preceding claim in which component (i) is coupled to the carrier by direct covalent coupling.
- 7. An immunogenic composition according to any of claims 1 to 5 in which component (i) is fused to the carrier.
- 8. An immunogenic composition according to any preceding claim in which the adjuvant comprises liposome, 3D-MPL and QS21.
- 9. An immunogenic composition according to any of claims 1 to 7 in which the adjuvant comprises oil-in-water emulsion low dose; 3D-MPL and QS21.

WO 2005/058349 PCT/EP2004/014379

10. An immunogenic composition according to any of claims 1 to 7 in which the adjuvant comprises oil-in-water emulsion low dose; 3D-MPL and QS21.

- 11. An immunogenic composition according to any of claims 1 to 7 in which the adjuvant comprises oil-in-water emulsion.
- 12. A process for the manufacture of an immunogenic composition according to any of claims 1 to 11 comprising mixing immunogen (a) with the adjuvant.
- 13. A vaccine composition comprising the immunogenic composition as described in any of claims 1 to 12 in combination with a pharmaceutically acceptable excipient, adjuvant or vehicle.
- 14. A process for the manufacture of a vaccine composition according to claim 13 comprising mixing the immunogenic composition of any of claims 1 to 11 with a pharmaceutically acceptable excipient, adjuvant or vehicle.
- 15. A method of preventing or treating a disease or disorder, in particular an autoimmune-implicated disease by administration of an immunogenic or vaccine composition according to any of claims 1 to 11 or 13.
- 16. Use of an immunogenic composition according to any of claims 1 to 11 or 13, in the manufacture of a medicament for the prevention, therapy or treatment of a disease or disorder, in particular an autoimmune-implicated disease or disorder.
- 17. A method or use according to claim 15 or 16, in which the medicament or composition is for prevention, therapy or treatment of a disease or disorder of a mammal.
- 18. A method or use according to any of claims 15 to 17, in which the medicament or composition is for prevention, therapy or treatment of a disease or disorder of a human.
- 19. A method or use according to any of claims 15 to 18, in which the medicament or composition is for prevention, therapy or treatment of multiple sclerosis; Crohn's disease; thyroiditis; or rheumatoid arthritis

WO 2005/058349 PCT/EP2004/014379

20. A kit comprising an immunogen according to any preceding claim and an adjuvant comprising one or more of cholesterol; oil-in-water emulsion; oil-in-water emulsion low dose; tocopherol; liposome; QS21; and 3D-MPL.